

Appl. No. 09/889,309
Amdt. filed December 4, 2003
Responsive to OA of September 4, 2003

REMARKS

Claims 18-43 are now in this application.

By this amendment, new claim 43 has been added, and several of the dependent claims have had their dependency changed so that they are now dependent on new claim 43.

In paragraph 1 of the Office action the examiner raised an issue with respect to the drawings. It is pointed out that figure 1 includes a showing of two areas of pole housing 10, one near the middle of figure 1, the other near the bottom. Near the top of figure 1 gear housing 5 is clearly shown as integral with the pole housing 10, by means of the two components being a solid piece, having the same hatching with no breaks shown in the structure. Further, near the bottom of figure 1 the lower section of element 10 is also shown with the same hatching. Clearly, figure 1 indicates that all three, gear housing 5, pole housing 10 near the middle of figure 1, and pole housing 10 near the bottom of figure 1 are simply different areas of the same piece of structure, and that all of these areas are integrally part of the same structure. Further, figure 2e is an amplified showing of the pole housing 10. It also shows that the two areas of pole housing 10, as well as the gear housing 5, are all one piece.

In paragraph 3 of the Office action the examiner has raised an issue with respect to the clarity of the wording of claims 27, 28, 41 and 42. It is believed that

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the changes made to these claims will satisfy the examiner, and that he will now find these claims to be definite. In particular, each of these claims has been amended to now recite a shoulder in the pole housing which holds either the magnet or the short circuit element against the pole housing, and that the recited element also engages the other of these elements.

In paragraphs 4 and 6 of the Office action the examiner rejected claims 18-23, 25-38 and 40-42, either as anticipated by Kobman et al or as unpatentable over Kobman et al in view of Bobay et al.

In so far as this rejection might be repeated against claim 18, **which has not been amended**, or considered against any other claims which are presently in the application, it is pointed out that the disclosure of Kobman et al includes a motor housing which is also a pump housing. At column 3, lines 15-20 Kobman et al speak of the pump having a gear and rotor assembly 32.

However, this is the only point in their specification where Kobman et al recite anything that might possibly imply that the housing could be considered to include a gear housing. **Kobman et al do not disclose any gears.** Thus, there are no “gears” within a “gear housing”, and accordingly, **there is no “gear housing” anywhere in the teachings of Kobman et al.**

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Further, it can be seen from their drawings, that Kobman et al do not show any gears. Thus, there can be no gear housing within the teachings of Kobman et al, let alone a motor housing which is integral with any part of a gear housing.

Likewise, the reference to Kobman et al does not teach a pole housing which is integral with any other housing, whether it be a gear housing or a pump housing. In Kobman et al one housing element 28 is surrounded by a second housing element 26. These housing elements are not integral. Instead, Kobman et al need to supply seals, which are unnumbered but can be seen in figure 1 of Kobman et al at either end of housing element 26. Clearly, the housing elements of Kobman et al cannot in any way be considered to be integral as recited in the claims of this application, especially un-mended claim 18.

The reference to Bobay et al does not supply anything which teaches the deficiencies of Kobman et al. In Bobay et al also, there are no gears taught, and so there can be no gear housing. Since neither Kobman et al nor Bobay et al teach anything which can be considered to be a gear housing, clearly neither can be thought of as teaching a motor housing which is integral with, (in one piece with) any part of a gear housing, or any other housing be it a gear housing or a pump housing, as recited in the claims of this application.

Also, claims 20, 21, 25-30, 35, 36 and 40-42 each include recitations which neither the reference to Kobman et al. nor the reference to Bobay et al. have.

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In particular, claims 20 and 21 recite that at least one magnet is at least partly surrounded by the material of the pole housing. This structure cannot be found in either of these references.

Claims 25-26, 35-36 and 40 recite that the short circuit element has a protrusion which is surrounded by the material of the pole housing. This is additional structure which cannot be found in either of these references.

Claims 27-28 and 41 recite that the at least one magnet is secured by positive engagement in the plastic of the pole housing, and also by non-positive engagement with the short circuit element, which is located radially outward. This is further structure which cannot be found in either of these references.

Claim 29 recites that the end shield is one piece with the bearing and that this structure is insertable into the pole housing. This is another item of structure which cannot be found in either of these references.

Claim 30 recites that the end shield is axially positionable in the pole housing in order to adjust the longitudinal play of the armature. This again is structure which neither of these references teaches.

Claim 42 recites that the short circuit element is secured by positive engagement in the plastic of the pole housing, and also by non-positive engagement

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with the magnet, which is located radially inwardly. This is further structure which cannot be found in either of these references.

Applicant's figures 1 and 2a-e, and also the specification at page 5, lines 22 and 23, and page 6, lines 12 to 16, show that the magnets 32 rest in part directly against the pole housing 10 and are maintained, either in part (Figs. 1, 2a, 2e), or wholly (Figs. 2b, 2c, 2d), by the pole housing 10.

Further, the end shield 43 is a part of the bearing housing 10, it closes off the pole housing 10 on the motor side of this housing. It constitutes a bottom of the pole housing.

In the prior art, a holding cup for holding the magnets is required. Either further fastening means, for example adhesives or springs are needed for fastening the magnets on the holding cup, or the magnets are held by means of a press fit in the holding cup. The magnets are brittle, and therefore if subjected to mechanical stresses often break.

As taught in the present application, the magnets are held in a simple manner and without appreciable mechanical stress directly by the pole housing. Thus the means taught in this application for holding the magnets in the housing gain substantial advantage over the prior art.

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Moreover, with the present application the pole housing bottom constitutes an end shield which also holds the motor bearing in place.

In addition to the prior art cited by the examiner, it is noted that during the prosecution of the German application which corresponds to this application, the German patent office cited additional prior art, copies of which are attached to an IDS statement which is being filed concurrently with this amendment. It is believed that the claims presently in this application also define patentably over this additional prior art.

In particular, none of this prior art teaches the mounting system for the magnets and short-circuit elements as taught by and claimed in this application.

The Commissioner is authorized to charge payment of the filing fees of \$18.00, for one new claim over twenty, or any other necessary fees in connection with this communication, to Deposit Account Number 07-2100. A separate fee sheet accompanies this amendment for purposes of paying this fee, and also for paying the fee involved for the citation of new prior art.

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Entry of this amendment, and allowance of the claims are respectfully solicited.

Respectfully submitted,


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Date: December 4, 2003

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